



# STEWARDSHIP REPORT 2011

**UNITED STATES ARMY EUROPE**  
INTEGRATED TRAINING  
AREA MANAGEMENT



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## ABOUT THIS REPORT

The Stewardship Report on the U.S. Army Europe Integrated Training Area Management program is published annually and reports performance and accomplishments for all program components. The report covers the period 1 January to 31 December 2011.

For further information and an electronic version of this and our previous reports, see our website: <https://srp.usareur.army.mil>

We welcome your feedback. Please send your comments to:

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7th U.S. Army JMTC  
Attn: AETT-TS (Bldg 3007)  
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Or email to:

[usareur.srp.contact@us.army.mil](mailto:usareur.srp.contact@us.army.mil)



## UNIFIED LAND OPERATIONS

USAREUR prepares for future contingencies while routinely supporting ongoing operations for multiple functional and geographic Combatant Commands. USAREUR uses a building block approach to plan, train and execute Unified Land Operations.



More than 25 years of ITAM support has well prepared Hohenfels and other USAREUR training areas for the reintroduction of conventional mounted and dismounted maneuvers, an anticipated cornerstone of future Unified Land Operation exercises.



- 173rd Airborne Brigade Combat Team running through STX lanes for their training event at Hohenfels Training Area Germany.
- A view of the tank commander's position on one of the opposing force's vehicles.
- Soldiers from the New Jersey National Guard's 1st Squadron, 102nd Cavalry Regiment, 50th Infantry Brigade Combat Team, dismount from their vehicle during USAREUR's 1st Battalion, 4th Infantry Regiment's assault on the 173rd Airborne Brigade Combat Team.
- A Soldier guides the winch during recovery operations of a downed vehicle.
- A Soldier from the New Jersey National Guard's 1st Squadron, 102nd Cavalry Regiment, 50th Infantry Brigade Combat Team, searches for enemy forces.



Decisive action training events provide a more comprehensive approach to training Soldiers and units to fight alongside our allies and partner nations in the most demanding and complex operating environments. These strengthened alliances help prevent future conflict and encourage deterrence while preparing to prevail if called upon.

## LETTER FROM THE COMMANDER



I am pleased to present the Annual Stewardship report on the U.S. Army Europe (USAREUR) Integrated Training Area Management (ITAM) program for 2011.

Headquartered in Grafenwoehr, Germany, the 7th Army Joint Multinational Training Command (JMTC) is the largest and most diverse training command outside the continental United States. By integrating mission with environmental requirements and sound land management techniques, the JMTC is able to provide realistic and relevant training to U.S. Army, Joint Service, NATO and allied units and leaders.

We are now starting to prepare our forces to meet tomorrow's challenges. Joint Multinational Readiness Center (JMRC) just recently completed a rotation that prepared the 173rd Airborne Brigade to defeat hybrid threats in a Full-Spectrum Training Environment. A common theme throughout all of our training is the integration of multinational allies and partners. This dynamic relationship ensures we prevail in today's wars while laying the foundation to prevent and deter future conflict.

The 57,000-acre Grafenwoehr Training Area offers the largest and most dynamic live-fire training facility in Europe. The neighboring 40,000-acre JMRC Hohenfels Training Area provides realistic and challenging combat training up to the brigade level. For these Major Training Areas and the multiple Local Training Areas that extend from Schweinfurt to the Alps, the ITAM program is responsible for providing sustainable and balanced stewardship of USAREUR's training land platform. This stewardship is possible through both the substantial investment the U.S. Army has made in the training land assets and the strong support JMTC receives from the many stakeholders involved in training area management.

JMTC's commitment to stewardship remains steadfast. The Command's intention is to provide a candid assessment of our achievements and challenges. We are always pleased to receive any feedback; the details of how to contact ITAM can be found on the contents page.

Strong Soldiers, Strong Teams!!

*Bryan L. Rudacille*

**BRYAN L. RUDACILLE**  
COL, IN  
Commanding



FOREWORD

“Mud to the thighs or dust in the eyes.”

Welcome to the U.S. Army Europe’s training areas circa mid-1980s.

Since then, as visitors quickly note, the moonscape that once characterized these training areas is gone. ITAM, in partnership with the Garrison Environmental Offices, German Federal Forestry, and other key stakeholders, went into land management overdrive – building erosion control infrastructure, monitoring flora and fauna, creating an authoritative geospatial database, increasing environmental awareness and, most importantly, supporting an ever changing military training mission.

It has been my privilege to witness this change first hand over the last decade and to work with such dedicated professionals. USAREUR ITAM has matured both spatially and functionally, growing from a Hohenfels Training Area – centric erosion repair focus to a multifaceted program providing monitoring, mapping, land maintenance, and land reconfiguration to all U.S. Army training areas in Europe. ITAM has pioneered best management practices and innovative technologies that are now recognized across the land management profession as standards for sound environmental sustainability.

USAREUR ITAM again in 2011 was one of the winning Department of the Army Sustainable Range Program Installations. COL Connors, Director TRADOC Capabilities Manager – Live, presented Regional Training Support Division Baumholder with the Tier 3 Top Installation Award at the Army Training Support Systems Workshop in Dallas in August. This award is an honor and truly reflects the quality of the SRP workforce in Europe!



USAREUR receives award for Top 2011 SRP Tier 3 installation

As always, USAREUR ITAM’s priority is to provide training land that meets the Senior Commander’s training requirements with focus on sustaining the availability, accessibility, and capability of training areas. ITAM must strive to ensure sustained flexibility of the training land platform in order to provide training support necessary to generate and sustain units trained in Full-Spectrum Training Environment that can succeed in a complex and uncertain operational environment.

I look forward to intensifying efforts to formalize partnerships with internal and external stakeholders who will continue to be the cornerstones of all USAREUR ITAM activities. None of the accomplishments cited in this report could have been achieved without the support of the Command and the dedication of ITAM’s valued partners. This report provides a snapshot of the program and more importantly attempts to address ITAM’s focus for the future. I hope you find our latest Stewardship Report constructive. We are always pleased to receive feedback.

*Nathaniel Whelan*

Nathaniel Whelan  
USAREUR ITAM Program Manager

MEASURING SUCCESS

ITAM'S EFFECTIVENESS

The ultimate goal of the ITAM program is to support the training mission. Many of the program’s 2011 accomplishments are discussed and illustrated in the following pages.

Below are the five components of the ITAM program and their objectives in support of the training mission. The accomplishments shown demonstrate the effectiveness in 2011 of meeting or exceeding these goals.

OBJECTIVES

ACCOMPLISHMENTS

TRAINING REQUIREMENTS INTEGRATION (TRI)

- Ensure sustained access to training lands that support realistic training conditions.
- Quantify training land carrying capacity, and provide military trainers and land managers quality information with which to make sound decisions.

- Received award for Top Tier 3 SRP Installation in 2011, recognizing ITAM’s efforts in maximizing training land access and availability.
- Supported mapping requirements and site selection for 8 RTLP range modernization projects (e.g. live-fire ranges, IED lanes, urban facilities).
- Integrated Soldier feedback and lessons learned from S3 / G3 conferences, Company Commander and First Sergeant Courses, Training Area Working Groups, and other forums into products and services.

RANGE AND TRAINING LAND ASSESSMENT (RTLA)

- Assess training lands by identifying issues (e.g. erosion degradation) and recommend corrective actions.
- Provide Command-level information to assist with force structure and stationing decisions at Command and Department of Army (DA) levels.

- Conducted trend analysis on 25 years of high-resolution land use / land cover satellite imagery-derived datasets for Major Training Areas (MTAs) to determine significant trends and recommendation for future mapping priorities.
- Conducted mapping site visits to foreign training areas in Italy and Croatia in support of training exercise reconnaissance and terrain feature data acquisition.
- Completed update to the Historic Forest Mapping project for Grafenwoehr Training Area which added 2008 data to existing 1945, 1952/3, 1963, 1983, 1988, and 1999 datasets.

LAND REHABILITATION AND MAINTENANCE (LRAM)

- Sustain overall condition of installation lands to ensure long-term military viability.
- Increase available and accessible maneuver land.
- Enhance realism of training environment to replicate the contemporary operational environment.

- Supported >25 projects maintaining or enhancing erosion control infrastructure at enduring MTAs and LTAs.
- Completed final report of 14 “next generation” reconfiguration best management practices focused on enhancing training realism. Funded and executed five “Land Cover Replication” projects at multiple local and major USAREUR training areas.
- Increased Grafenwoehr Training Area ITAM program reliance on use of in-house labor and equipment, which significantly lowered land repair and reconfiguration costs for five projects.

SUSTAINABLE RANGE AWARENESS (SRA)

- Educate land users and provide operational awareness for environmental professionals to ensure no net loss of training capability.
- Support High Payoff Theater Security Cooperation activities.

- Disseminated >41K Soldier Field Cards throughout Command, detailing environmental and safety guidelines.
- Provided instructional support to events reaching 30 multinational partners, including NATO/PfP events and the 5th annual AFRICOM ITAM Workshop.
- Supported numerous public and Command outreach initiatives, including the Grafenwoehr Museum Exhibit and Community Relations Event, Armed Forces Network infomercials, Earth Day and other community events.

GEOGRAPHIC INFORMATION SYSTEM (GIS)

- Create, manage, and distribute authoritative standardized spatial information, products, and services for the execution of training strategies and missions on U.S. Army Europe ranges and training lands.

- Disseminated 14K training area special maps, 2.4K ITAM Viewers, 1K raised relief maps and deployed one new Mapping Kiosk to Regional Training Support Division Italy. Produced two final and six draft Military Installation Maps and supported 789 customized map and GIS analysis requests (69% from units) and 4.4K user visits from 1.4K unique users to the Army Range Mapper (ARM) website.
- Provided 30 GIS briefings / training sessions at Army workshops and events and conducted 17 site visits to USAREUR and host nation training areas for GIS data collection and validation.
- Coordinated acquisition of 16 new aerial imagery overflights and 10 satellite imagery acquisition projects covering USAREUR training areas and ranges.



## READY AND FORWARD DEPLOYED

**"EUROPE IS A STRATEGIC LOCATION FROM WHICH WE CAN SUPPORT OPERATIONS THROUGHOUT THIS HEMISPHERE, WHILE WE WORK WITH OUR ALLIES AND PARTNERS, SO OUR GOAL IS TO BE POSTURED TO RESPOND TO THE WIDE RANGE OF CHALLENGES EMERGING IN THE 21ST CENTURY."**

Lt. Gen. Mark P. Hertling  
Expectations for the future



### U.S. ARMY EUROPE (USAREUR)

U.S. Army in Europe trains and leads Army Forces in support of U.S. European Command and Headquarters, Department of the Army by:

- Training and preparing Full-Spectrum capable forces for global employment.
- Strengthening alliances and building partner capacity and capability.
- Providing Army Service Component Command and Title 10 support.
- Continually seeking to improve the readiness and quality of life of our Soldiers, Army Families and Civilian workforce.



### JOINT MULTINATIONAL TRAINING COMMAND (JMTC)

Headquartered in Grafenwoehr, Germany, the 7th Army JMTC is the largest training Command outside the continental United States. JMTC's vast ranges, simulation centers, classrooms and facilities provide realistic and relevant training to U.S. Army, Joint Service, NATO and allied units and leaders. ITAM ensures that JMTC training resources continue to remain available, accessible and ready to support the mission.

**JMTC's Mission:**  
7th Army JMTC serves as USAREUR's forward-based Training Support Command and provides world-class training of Forces and Leaders to dominate in Full-Spectrum Operations to support USAREUR's Global requirements and U.S. European Command's Strategy of Active Security.



### TRAINING SUPPORT ACTIVITY EUROPE (TSAE)

TSAE serves as the headquarters for USAREUR's Sustainable Range Program. The TSAE mission is to identify, acquire, manage and sustain training resources required to support all echelons of training and to provide state-of-the art training support throughout USAREUR's area of responsibility. Under TSAE, 15 Training Support Centers provide one-stop shops for the Soldier.

## SUSTAINABLE RANGE PROGRAM PRINCIPLES

### ➤ Information Excellence

Ensures the U.S. Army is using the best available information and science to support its ranges and land assets. Information excellence also ensures that the U.S. Army has an increased understanding of the environmental impacts of live-fire training and a user assessment of the doctrinal implication of U.S. Army transformation that affects live-fire training.

### ➤ Integrated Management

Ensures that management is functioning correctly, such that ranges and land assets are integrated effectively into supporting the training mission. As indicated in the name, the ITAM program works cooperatively with multiple stakeholders, such as the Training Command, the Garrison Command, the Host Nation military, the local environmental authorities, and the surrounding local population.

### ➤ Outreach

Provides an outlet for the U.S. Army to explain to the public why training activities are essential to the U.S. Army's mission and improves the U.S. Army's understanding of public perception of, and concerns about, the U.S. Army training and range operations.



### SUSTAINABLE RANGE PROGRAM (SRP)

The ITAM program and the Range and Training Land Program (RTLTP) comprise the U.S. Army's Sustainable Range Program. The mission of the SRP is to maximize the capability, availability, and accessibility of ranges and training land to support doctrinal training, mobilization, and deployments.



### INTEGRATED TRAINING AREA MANAGEMENT (ITAM)

ITAM is a key component of the U.S. Army's commitment to training land sustainability and environmental stewardship. The ITAM program provides a uniform training land management capability across the Command.

### ITAM Components

- Training Requirements Integration (TRI) provides training support procedure that integrates training requirements with management of natural and cultural resources.
- Range and Training Land Assessment (RTLTA) characterizes and monitors an installation's natural resources, geospatially and temporally.
- Land Rehabilitation and Maintenance (LRAM) implements preventive and corrective land repair projects that ensure availability of training lands.
- Sustainable Range Awareness (SRA) promotes visibility of environmentally sensitive issues and instills a stewardship ethic among unit commanders, ground troops and neighboring communities.
- Geographic Information System (GIS) is a foundational element of SRP. GIS provides accurate, complete and standardized spatial data. GIS data and products adhere to federal, DoD and Army spatial data standards.

➤ Visit us on facebook






1. A candidate from the 8th Medical Company (Logistics) dons his protective gear for the Chemical, Biological, Radiological and Nuclear explosives portion of the 2011 USAREUR Expert Field Medical Badge Standardization and Testing in Grafenwoehr, Germany.
2. Medics from Charlie Company, 5-158, 12th Combat Aviation Brigade, an air-medical evacuation unit, practice hoists and medical evacuation during training at Grafenwoehr, Germany.
3. A Soldier from 173rd Airborne Brigade Combat Team throws a training grenade into a bunker during the USAREUR's Best Junior Officer Competition at Grafenwoehr, Germany.





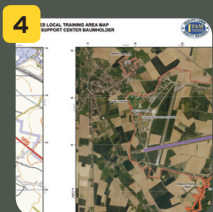
# ITAM 2011 WHAT AND WHERE?

## EUROPE

-  Full ITAM Support including Land Repair
-  Partial ITAM Support including GIS
-  ITAM Event Support including Theater Security Cooperation



**JMRC HOHENFELS**  
Dust Control; Repair / Replace Check Dams; Repair Damages Area A; Erosion Control Areas B and C; Maneuver Corridor Repair Area A; Maneuver Area Reconfiguration Area A; Erosion Surveys; Raised Relief Maps



**CHIEVRES**  
Military Installation Map Production



**ANSBACH**  
Land Cover Replication; Repair Maneuver Trails; Military Installation Map Production; GIS / GPS Mapping Site Visit



**OTHER ITALY LTAS**  
GIS / GPS Mapping Site Visits; Military Installation Map Production; Aerial Imagery



**STUTTGART**  
Establish Northern MOUT Trail; Military Installation Map Creation; GIS / GPS Mapping Site Visit



**SCHWEINFURT**  
Land Cover Replication; Repair Maneuver Trails; Environmental Assessment, Military Installation Map Production; GIS / GPS Mapping Site Visit



**SLUNJ**  
GIS / GPS Mapping Site Visit; Soldier Field Card Production; Satellite Imagery



**GRAFENWOEHR**  
LRAM at Maneuver Areas; Land Cover Replication; Rugged Terrain Trail, Troop Marching Trail, Training Area Reconfiguration; Range Charrette Support



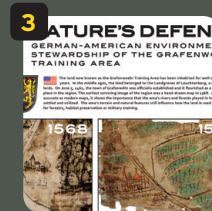
**BAUMHOLDER**  
Land Cover Replication; Repair Drainage and Trails; Military Installation Map Production; GIS / GPS Mapping Site Visit



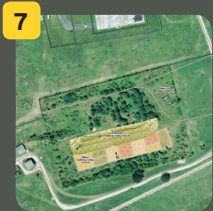
**OBERAMMERGAU**  
Instructional Support to the NATO School



**OTHER EASTERN EUROPE TAS**  
Military Installation Map Production; Satellite Imagery



**Grafenwoehr**  
Cultural and Military Museum Community Relations Reception



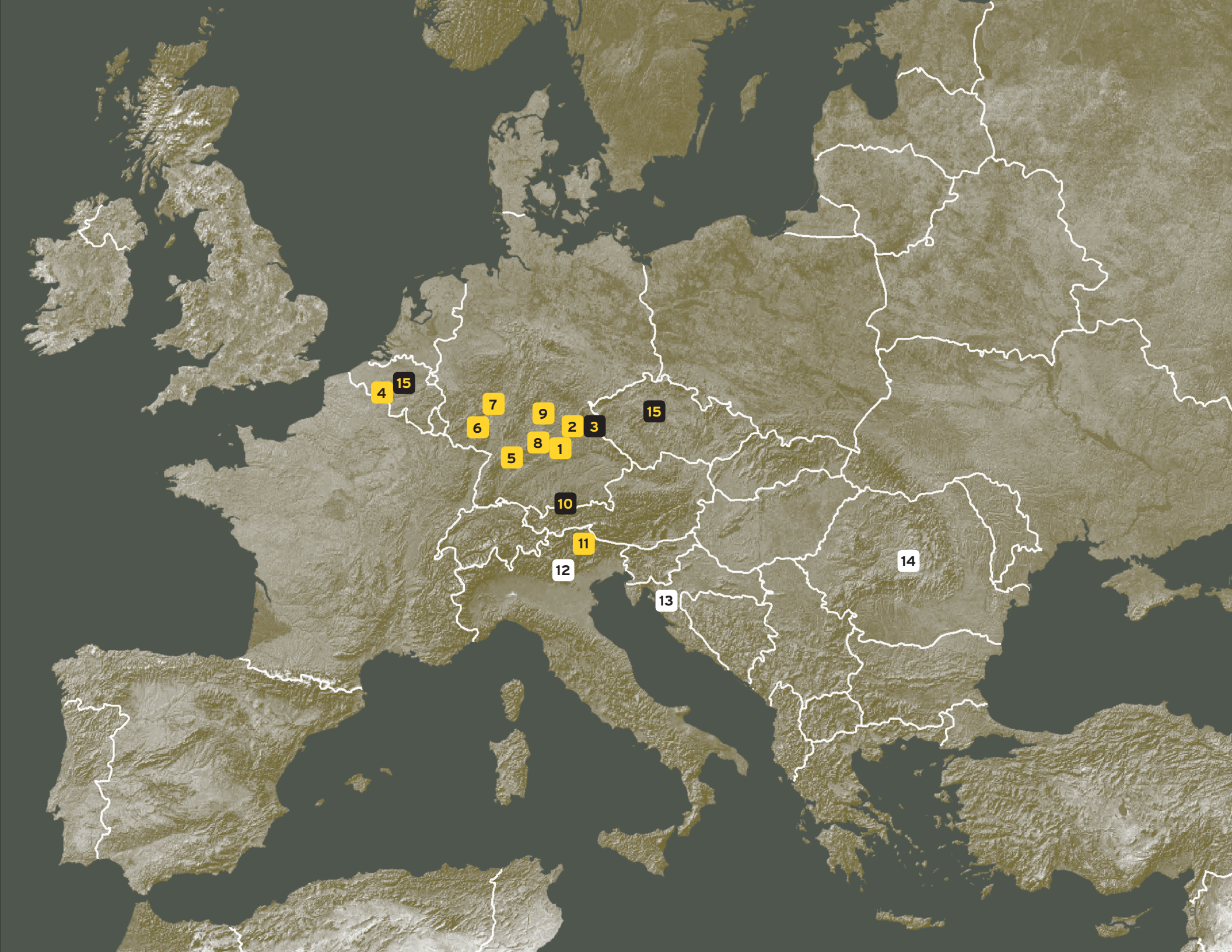
**WIESBADEN**  
Land Cover Replication; Repair Maneuver Trails; Military Installation Map Production; GIS / GPS Mapping Site Visit



**CAO MALNISIO**  
Revegetation; Shrub Clearance; Military Installation Map Production; Land Repair Project Scoping



**BRUSSELS / PRAGUE**  
NATO Environmental Protection Working Group





# ITAM 2011 WHAT AND WHERE?

## AFRICA



**1**  
**ST. LUCIA  
(REPUBLIC  
OF SOUTH AFRICA)**  
Theater Security  
Cooperation Event



**2**  
**NAIROBI,  
KENYA**  
Theater Security  
Cooperation Event



**3**  
**MUSANZE,  
RWANDA**  
Theater Security  
Cooperation Event



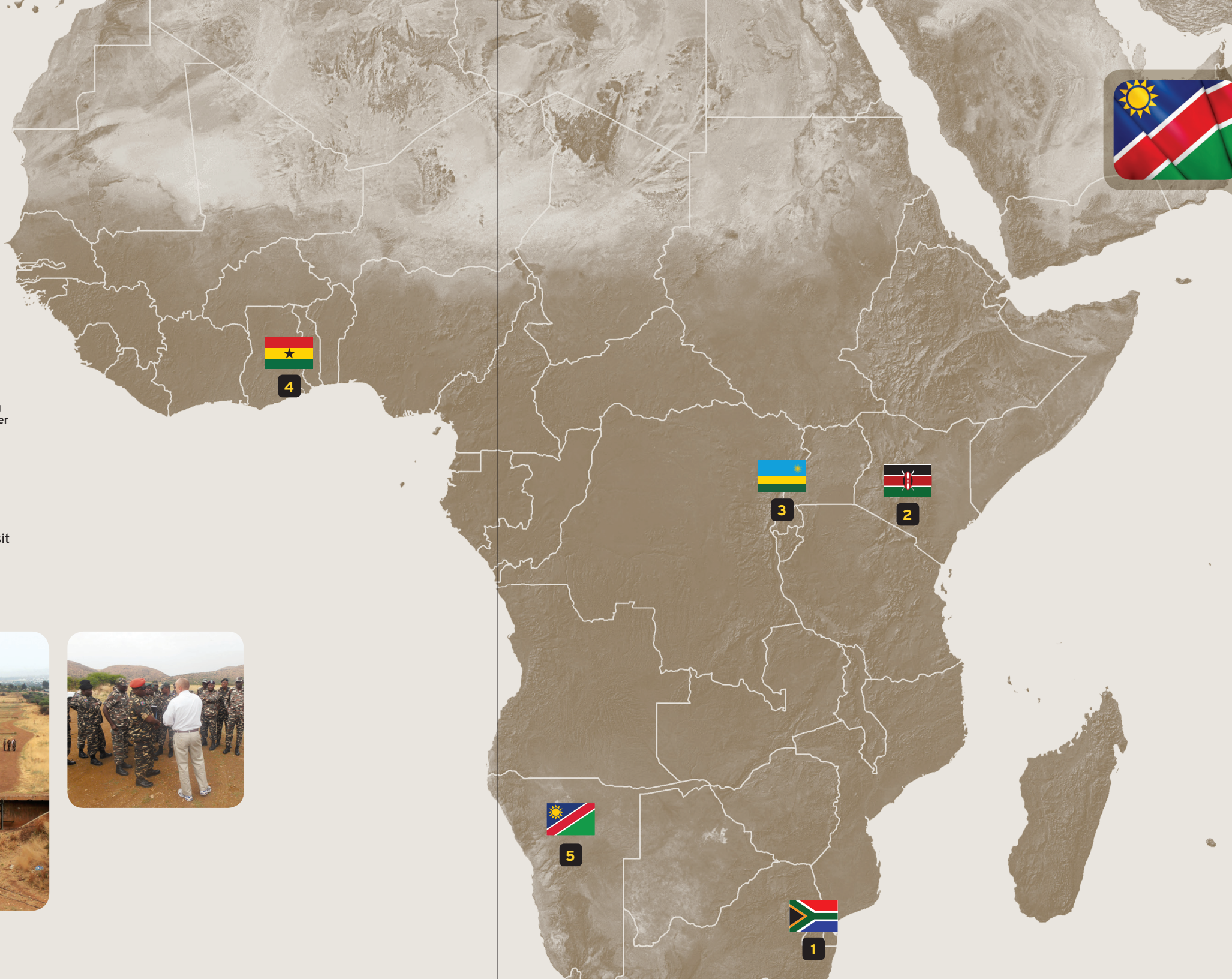
All Africa events  
are funded and  
organized by U.S.  
Africa Command  
(AFRICOM)



**4**  
**ACCRA,  
GHANA**  
Theater Security  
Cooperation Event  
 Kofi Annan  
International  
Peacekeeping  
Training Center



**5**  
**WINDHOEK,  
NAMIBIA**  
Theater Security  
Cooperation Event;  
Training Area Site Visit



## NAMIBIA

ITAM supported the 1st joint U.S. Africa Command, Joint Multinational Training Command (JMTTC) and U.S. Embassy Environmental Security workshop conducted in Windhoek, Namibia from 27-30 September 2011.

22 Namibian Defense Forces (NDF) Army representatives participated in this event supported by a U.S. team of technical experts. Key objectives of the workshop included information exchange and capacity building in the area of environmental considerations in military activities, sustainable management of military training ranges, and environmental outreach for mission sustainability.

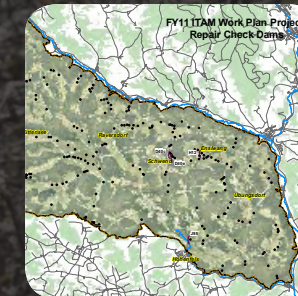
The workshop, funded and organized by U.S. Africa Command (AFRICOM) targeted NDF military range planners/managers responsible for developing and sustaining military training areas. The workshop was successful in building capacity and dialog through defense-related environmental topics and will likely include a follow-on event in the coming years.





# ITAM 2011 PROJECT CATALOG

Strong support from both Department of the Army and U.S. Army Europe enabled USAREUR ITAM to execute multiple, high impact projects. ITAM Coordinators and Training Support Center staffs were responsible for coordination and management of 18 land management projects covering most of USAREUR's training areas. The Project Catalog provides a broad overview of how ITAM is increasing the availability, accessibility and capability of USAREUR's training areas.



## JMRM HOHENFELS LRAM

### Repair / Replace Check Dams

Check dams were repaired and functionality maintained by removing sediments, repairing maneuver damages, and replacing check dam infrastructure.



## GRAFENWOEHR LRAM

### Land Cover Replication

Created 4 ha of rugged terrain immediately south of the Urban Operations Site replicating terrain features found in the Operational Environment.



## JMRM HOHENFELS LRAM

### Dust Control

Dust from approximately 40 km of maneuver trails was reduced by applying calcium chloride, helping to improve safety for training units.



## JMRM HOHENFELS LRAM

### Erosion Control Areas B and C

Maneuver damage in portions of Areas Bravo and Charlie were repaired. Linear erosion gullies were leveled, contoured, and reseeded; and rocks and level crossings were installed.



## RTSD ITALY GIS

### Aerial Imagery

High resolution true color aerial orthoimagery was procured or received from IMCOM-Europe and from liaison with host nation for the following training areas: Rivolto Airfield, Longare Communication Site, Tirrenia Recreation Site, and ASP7 - Vicenza Basic Load Storage Area.



## FINTHEN LTA LRAM

### Land Cover Replication

A 3.5 ha sloping parcel adjacent to the Finthen Combat Outpost and Urban Operations Site was reconfigured to replicate the complexities of terrain features as found in the Operational Environment.





#### JMRC HOHENFELS LRAM

**Maneuver Corridor Repair**  
Maneuver corridors west of CP13, south of Mud Hut Village, southeast of Schwend, and west of Uebungsdorf are being repaired, including cut and fill excavation, culvert and ditch installation / repair, installation of gravel trail beds, installation of associated erosion control structures, and reseeding. Repairs will improve accessibility along multiple maneuver trails and reduce the effects of uncontrolled erosion.

Maneuver area was reconfigured and increased by removing off-limit markers. Maneuver trails and the existing network of erosion control structures were also repaired.



#### GRAFENWOEHR LRAM

**Training Area Reconfiguration**  
Additional sections of the dismounted Rugged Terrain Trail were constructed to offer local training conditions similar to those encountered in the Operational Environment. The trail is located adjacent to the existing Troop Marching Trail and small arms ranges to facilitate use by trainers as an option to existing training regimes.



#### CAO MALNISIO, ITALY LRAM

**Open Maneuver Space**  
Maneuver space at Cao Malnisio was clear cut. All bushes, trees, and grass were cut to a height of 2 cm or less, in accordance with Italian law.



#### CAO MALNISIO, ITALY LRAM

**Revegetation**  
Bushes and trees were planted along the southern training area boundary to provide concealment and minimize dust migration.



#### PFAENDHAUSEN LRAM

**Land Cover Replication**  
Created 2 x 2 ha parcels of rugged terrain adjacent to the multiple Urban Operations Sites. Terrain replicates features found in the Operational Environment (OE).



#### JMRC HOHENFELS GIS

**Raised Relief Maps**  
1K raised relief maps of JMRC Hohenfels Training Area and 500 raised relief maps of Europe were produced and disseminated to the USAREUR / JMTC Command and units.



#### SLUNJ, CROATIA GIS

**Aerial Imagery and GPS Mapping**  
0.25 m true color satellite orthoimagery and GPS mapping site visits were used to produce military installation maps in support of USAREUR exercises for Slunj Training Area.



#### FINTHEN LTA LRAM

**Maneuver Trail Enhancement**  
Multiple rugged mounted maneuver trails were constructed along the newly acquired training land parcel between the Combat Outpost and Urban Operations Site. Additionally, maneuver trails along the northeast portion of the LTA were repaired.



#### BAUMHOLDER LTA LRAM

**Land Cover Replication**  
A 2.5 ha sloping parcel immediately northeast of the Urban Operations Site was reconfigured to replicate the complexities of terrain features as found in the Operational Environment (OE).



#### BOEBLINGEN LTA LRAM

**Establish Northern MOUT Trail**  
A rugged 3 km mounted maneuver trail was constructed to create a northern access point to the Urban Operations site. The new trail branching from an existing main east-west maneuver trail was carved from a steep hillside.



#### USAREUR GIS

**Product (Large Format) Reproduction**  
Installation Special maps were produced in large format (e.g. scale 1:25K) for distribution through the Training Support Centers and Range Operations. Other ITAM Training Support Products were also produced, including Soldier Field Cards, Leader Handbooks, ITAM Viewers, and Installation Specials.



#### JMRC HOHENFELS LRAM

**Erosion Control Area Charlie**  
Four active erosion features were repaired, along with associated trail repair and ditch installation, near the Short Take-Off and Landing (STOL) strip and MOUT Uebungsdorf in the Hauntal Watershed of Area C. The purpose of this project was to reduce erosion and its effects in the area, improving training safety and accessibility to maneuver areas and training facilities.

# "TRAIN AS YOU WILL FIGHT."

The Army's principles of unit training; FM 7-0 Training Units and Developing Leaders for Full Spectrum Operations.





# LAND COVER REPLICATION

TRAINING  
ENVIRONMENT  
= OPERATIONAL  
ENVIRONMENT

**LEGEND**

**REPLICATED PLOTS:**

- SMALL AGRICULTURAL PLOTS - REPLICATED LOW GROWING VEGETATION, UNEVEN TERRAIN

**REPLICATED VEGETATION:**

- ASSORTED NATIVE GRASS (1m)
- CHINA GRASS (1m)
- SUSU GRASS (2m)
- VINEYARD

**OTHER FEATURES:**

- SPOT HEIGHT (m)
- SINGLE ROCKS
- ROCK PILES
- WATER WELL
- WOODEN HUT
- EARTH BERM
- DIRT ROAD
- DITCH
- GABION WALLS

**OTHER FEATURES:**

- GABION TERRACE
- ROCK TERRACE
- WOODEN PLANK
- FARM COMPLEX
- CONNEX
- STAGING AREA
- MINEFIELD CLEARANCE TRAINING AREA
- TREE NURSERY
- INSTALLATION BOUNDARY

TERRACED FIELDS

TALL GRASS (SUSU)

WALLED FARM COMPLEX

VINEYARD

SMALL AGRICULTURAL PLOTS

TALL GRASS (CHINA)

MINE CLEARANCE TRAINING AREA

STAGING AREA

EXISTING TREE NURSERY

GRAFENWOEHR

## TRAINING REALISM THROUGH LAND RECONFIGURATION

Replicating land use and land cover to the greatest extent practicable is a fundamental approach for creating a training environment that is similar to the Operational Environment. Agricultural Terrain provides a relevant replication case study.

### WHY?

In the Operational Environment, Soldiers must move and maneuver around and through agricultural terrain where they face direct and indirect enemy threats. The enemy may influence the local populace with the income it receives from illegal crop harvest and fiercely defend these areas. The surrounding elevation, walls, berms, and trees can provide the enemy observation, fighting, and sniper positions. The trails, roads, irrigation ditches, and fields provide potential Improvised Explosive Device (IED) and landmine locations. Tilled fields are also potential hiding places for weapons caches. The risk of conflict can vary by season and harvest. In these conditions, units and Soldiers must be trained and competent in: patrolling; local security; cordon and search; reaction to ambush; hasty attack; hasty defense; and IED identification, defeat, and destruction.

### WHAT, WHERE, AND HOW?

Roughly 40% of the land within 1 km of villages in the Afghanistan Operational Environment is used for agriculture, with most agricultural sites smaller than 5 ha. A typical farm has smaller flat or terraced fields of irregular shape dictated by either the flat or rising terrain. The fields are surrounded or separated by a combination of: mud and stone irregularly-shaped berms 1 m wide and tall; mud or stone walls as high as 1.5 m; irrigation ditches less than 0.3 m wide and deep or larger irrigation ditches 1-1.5 m wide; narrow trails or unpaved single lane trails; or windbreaks of trees. Fences are rare. Gateways in walls and berms are high risk threats as potential IED sites. The fields have uneven surfaces and may be dry or filled with water given the time of year, type of crop, and irrigation conditions. Terraced fields are extremely difficult to traverse.

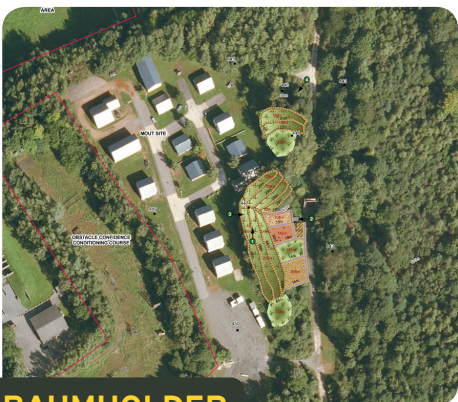


- 400m long natural rock terraces run along the elevation contours.
- Construction cost efficiencies were realized through use of in-house labor and equipment.
- Irrigation ditches, 0.3 to 1 m deep, provide obstacles to dismounted maneuvers.

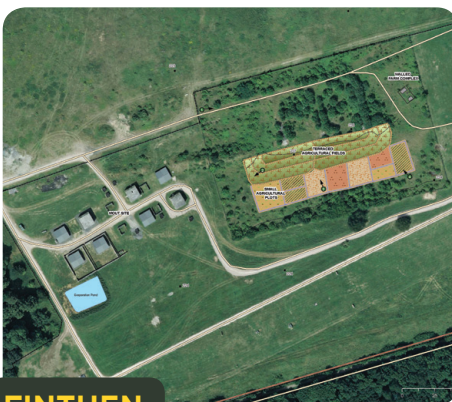


## GRAFENWOEHR

### 2011 REPLICATION PROJECT LOCATIONS



BAUMHOLDER



FINTHEN



OBERDACHSTETTEN



PFAENDHAUSEN



STEWARDSHIP REPORT 2011

# TRAINING AREA RANKINGS

There is a vast selection of training areas and ranges available to fit live-training requirements throughout the USAREUR AOR. The following summaries represent **only a selection** of training areas available in the USAREUR AOR. Contact your TSC for more information.



Maps of these areas and 150 additional training areas are available on the Army Range Mapper (see page 29).

Unit sizes based on TC 25-1 Maneuver/training Area Requirements for a Stryker Brigade Combat Team (SBCT) conducting offensive tasks. 1 hectare = 2.4711 acres.

## ELEVATION RANGE

## Temperature

## Precipitation

## LAND COVER & SIZE

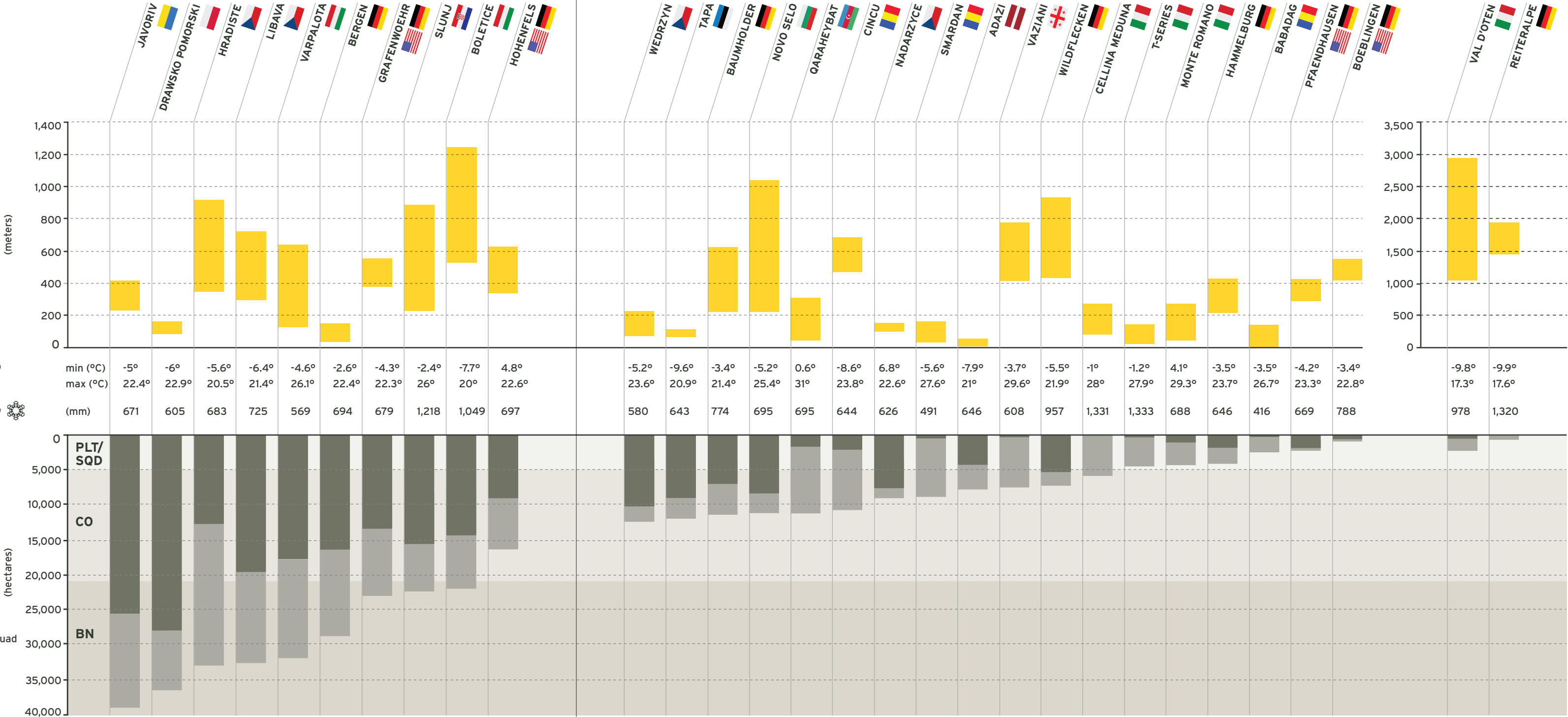
### Legend:

- Forest
- Open

PLT/SQD: Platoon/Squad

CO: Company

BN: Battalion





# GRAFENWOEHR HISTORIC FOREST MAPPING

## FOREST COVER CHANGE FROM 1945 TO PRESENT

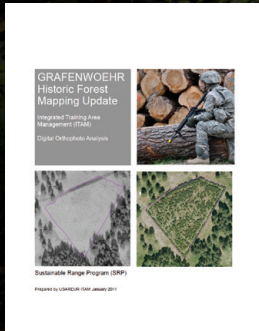
### OBJECTIVES

The aim of the Grafenwoehr Historic Forest Mapping project is to identify location and degree of change in forest cover over time. Information on the development of forested areas at Grafenwoehr Training Area, Germany over a time period of over 60 years provides an important and valuable means to successfully manage conditions suitable for military training activities. Open land is required for movement and maneuver training requirements. Forested areas are generally of less value for maneuver training. Environmental management measures aim at creating and preserving complex and diverse landscapes. Such diverse landscapes also support nature protection goals and enable the preservation of valuable habitats.

### METHODOLOGY

The following steps were performed to document change in forest cover over time:

- Manual digitizing of forest boundary vector data from digital aerial photography.
- Generation of statistics that characterize the extent of change in forest cover.



- Identification of areas where significant changes in forest cover have occurred.

Grafenwoehr Historic Forest Mapping Update is available on request

### KEY FINDINGS

The amount of forested area increased from 37.1% (8,450 ha) in 1952 to 53.4% (12,151 ha) in 2008.



GTA 2008  
FOREST COVER 53.4%



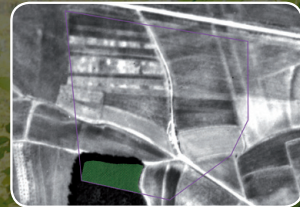
GTA 1952/3  
FOREST COVER 37.1%

OPEN AREA	YEAR	GRAFENWOEHR TA	DESIGNATED SUB TRAINING AREAS	OTHER AREAS
Change of open areas at Grafenwoehr TA broken down into designated sub training areas and other areas.	1952/3	62.9%	61.3%	64.8%
	2008	46.6%	47.6%	45.4%
	Change	-16.3%	-13.7%	-19.4%

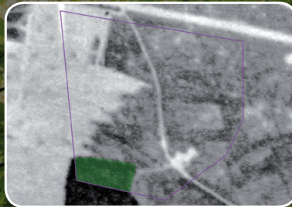
FOREST AREA	ANALYSIS	BASELINE FOREST COVER 1952/3	FOREST COVER 1999	FOREST COVER 2008
Comparison of total forested area between 1952/3 and 1999 and 2008.	Total forested area	8,450 ha	12,282 ha	12,151 ha
	Difference in forest cover (ha) compared to 2008	-3,701 ha	131 ha	-
	Difference in forest cover (%) compared to 2008	-43.8%	1.06%	-

### PA 150 OVER THE COURSE OF TIME

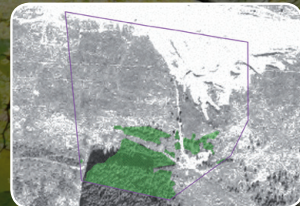
Forest change images have been prepared for each designated training area and each available aerial photo.



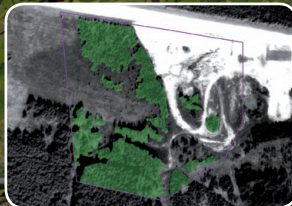
1945



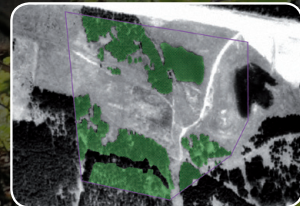
1952/3



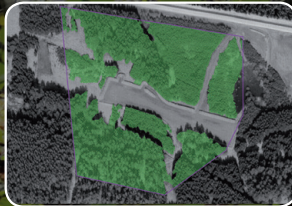
1963



1983



1988



1999



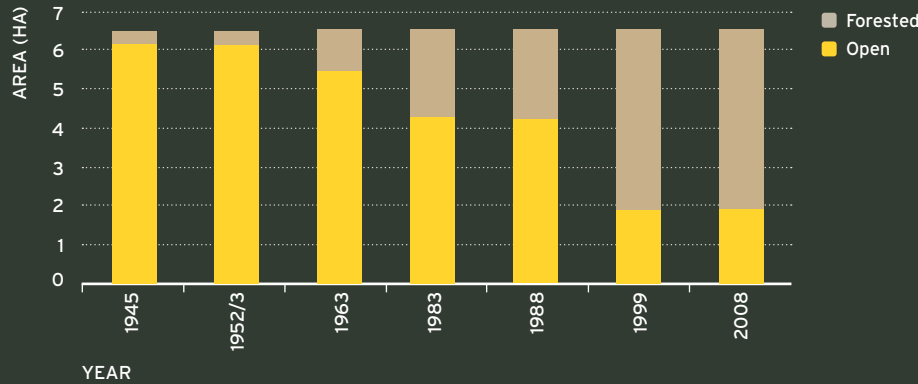
2008

### CASE STUDY: PA 150

The most significant reduction in open areas within a single category of designated training area relevant to maneuver training was determined for the Position Areas (PAs). In the time period between 1952 and 2008, the PAs lost a total of 21% of open land to forest encroachment. PA 150 is used to show how change in forest cover over time was documented. The proportion of forest cover rose steadily from 5% in 1945 to 71% by 2008.

#### PA 150 - TIME SERIES ANALYSIS GRAPH

The time series analysis graph provides for an overview of the proportion of forested to non-forested area at PA 150.



The following table provides an overview of the proportion of forested and non-forested areas in hectares and in percent, both in relation to the entire area of PA 150 and in relation to the total forested/non-forested area at PA 150 (cumulative).

YEAR	FORESTED (HA)	FORESTED (%)	CUMULATIVE (%)	OPEN (HA)	OPEN (%)	CUMULATIVE (%)
1945	0.34	5.23		6.17	94.77	
1952/3	0.38	5.87	12.09	6.13	94.13	-0.67
1963	1.04	16.04	206.52	5.47	83.96	-11.40
1983	2.26	34.73	563.74	4.25	65.27	-31.13
1988	2.31	35.44	577.34	4.20	64.56	-31.88
1999	4.65	71.35	1263.51	1.87	28.65	-69.77
2008	4.64	71.22	1260.95	1.87	28.78	-69.63



# USAREUR LAND USE LAND COVER STUDY

ANALYSIS OF 25 YEARS OF LAND COVER DATA

OBJECTIVES

Land Use / Land Cover (LULC) mapping supports the ITAM program by monitoring the condition of the training areas, supporting effective decision making regarding management of the lands, and providing long-term historical data as to the impacts and trends.

METHODOLOGY

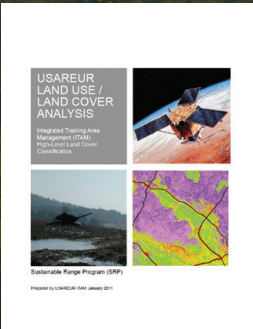
- Acquisition of high-resolution multispectral satellite imagery.
- Enhancement of the spectral data by means of the Normalized Difference Vegetation Index (NDVI).
- Performance of a combined supervised and unsupervised classification approach.
- Definition of calibration plots for the ground truthing.
- Preparation of LULC maps.
- Statistical analysis to detect changes in land cover from 1986/7 - 2009.

KEY FINDINGS

LULC data have provided essential baseline information for training and natural resource management activities at JMRC Hohenfels and Grafenwoehr since the late 1980s. The resulting land cover data are used primarily for evaluating trends in vegetation changes and identifying potential erosion risk areas.

A statistical analysis of the LULC data from the past decades showed that the annual change of the grasslands (total area) varies in ranges smaller than +/- 10%. Dense vegetation cover (grassland > 60%) is highly vulnerable to disturbances caused by high-use maneuver. Therefore, the range of annual change of the grasslands with >60% vegetation cover varies in the range less than +/-25%.

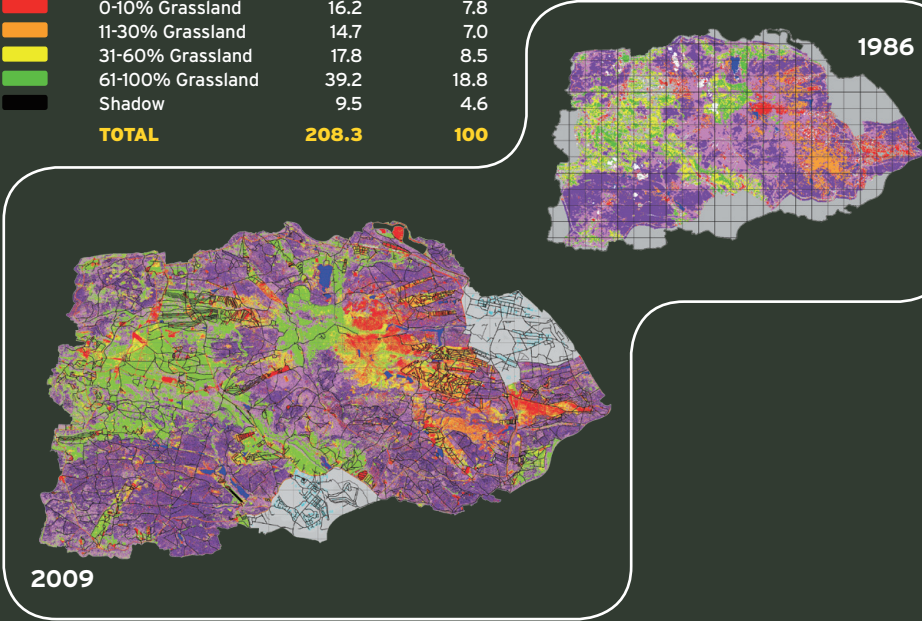
Nevertheless, over the whole time span, no significant deterioration of densely vegetated grasslands was reported. This fact and the absence of dramatic changes of the land cover can be interpreted as evidence of the successful implementation of the ITAM program, which aims to maintain stable landscape ecology.



USAREUR Land Use / Land Cover Analysis is available on request

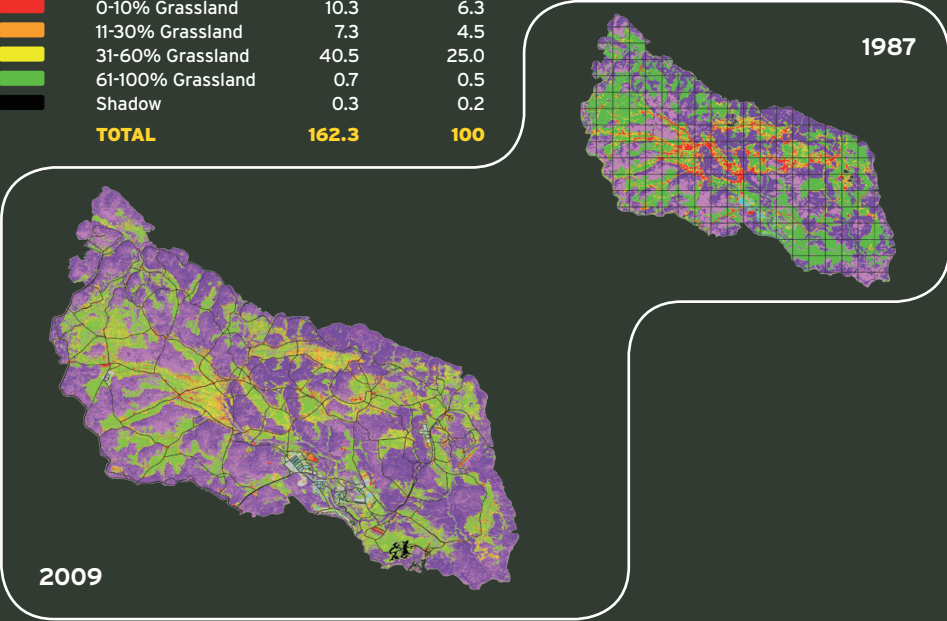
GRAFENWOEHR LULC MAP 2009

LEGEND	CLASS	AREA (KM²)	PERCENT
	Coniferous Forest	55.5	26.7
	Deciduous Forest	36.8	17.7
	Built-up	0.1	0.0
	Roads	14.0	6.7
	Water	2.5	1.2
	Developed Area	0.4	0.2
	Trails	1.6	0.8
	0-10% Grassland	16.2	7.8
	11-30% Grassland	14.7	7.0
	31-60% Grassland	17.8	8.5
	61-100% Grassland	39.2	18.8
	Shadow	9.5	4.6
	TOTAL	208.3	100

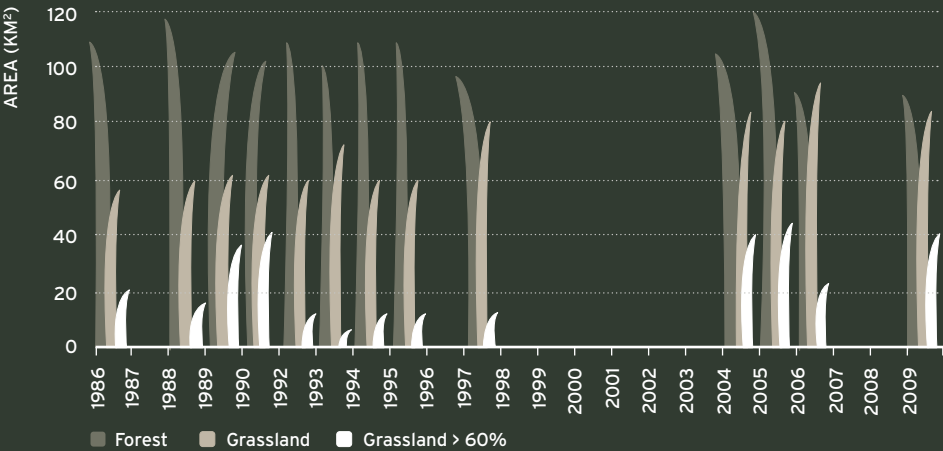


JMRC HOHENFELS LULC MAP 2009

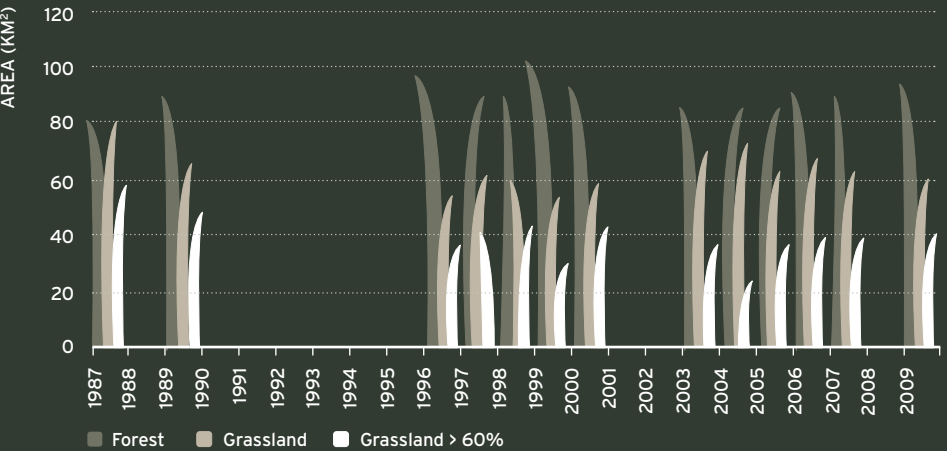
LEGEND	CLASS	AREA (KM²)	PERCENT
	Coniferous Forest	56.9	35.1
	Deciduous Forest	36.8	22.7
	Built-up	0.4	0.2
	Roads	5.1	3.1
	Water	0.1	0.1
	Developed Area	1.4	0.8
	Trails	2.5	1.5
	0-10% Grassland	10.3	6.3
	11-30% Grassland	7.3	4.5
	31-60% Grassland	40.5	25.0
	61-100% Grassland	0.7	0.5
	Shadow	0.3	0.2
	TOTAL	162.3	100



GRAFENWOEHR 1986 - 2009



HOHENFELS 1987 - 2009





# CALENDAR OF EVENTS

## SHARING WITH ITAM'S PARTNERS

The ITAM program continued to support a variety of awareness events throughout Europe, Africa, and the United States in 2011. USAREUR ITAM's participation ranged from event hosting to providing presentations and/or training sessions.



	EVENT	LOCATION	PARTICIPANTS	LEVEL	TYPE
16 - 18 November	RTSD Italy Field Mapping	Rivolto, Italy	6	SME	GIS
7 December	Company Commander / First Sergeant Course	Grafenwoehr, Germany	65	Units	ITAM
21 December	SRP Olympics	Grafenwoehr, Germany	22	All	All
6 - 12 March	SRP PMR	Williamsburg, VA	25	Command	ITAM
15 - 19 August	Training Support Systems (TSS) Workshop	Dallas, TX	500+	Command	ITAM
7 - 10 November	TSS Mission Essential Requirements Review	Grafenwoehr, Germany	6	Command	ITAM
24 February	USAREUR S3/G3 Workshop	Grafenwoehr, Germany	65	Units	ITAM
4 March	RTSD Italy Field Mapping	Monte Carpegna, Italy	5	SME	GIS
11 - 13 April	TSAE / SRP Program Management Review (PMR)	Grafenwoehr, Germany	25	Command	ITAM
22 April	ITAM Interview on Armed Forces Network	Grafenwoehr, Germany	1,000+	Public	SRA
5 May / 9 June	ITAM Viewer Training Class	Grafenwoehr, Germany	15	Units	GIS
10 - 12 May	SE Core Digital Terrain Build Site Survey	Grafenwoehr, Germany	6	SME	GIS
12 May	Earth Day	Grafenwoehr, Germany	200+	Public	SRA
3 June	RTSD Schweinfurt Field Mapping	Ansbach, Germany	5	SME	GIS
6 June	ITAM Interview on Armed Forces Network	Grafenwoehr, Germany	1,000+	Public	SRA
10 June	Company Commander / First Sergeant Course	Grafenwoehr, Germany	65	Units	ITAM
22 June	USAREUR EQCC	Heidelberg, Germany	30	Command	ITAM
18 - 22 July	RTSD Italy Field Mapping	Val D'Oten, Italy	6	SME	GIS
21 July	GPS Training Class	Grafenwoehr, Germany	5	SME	GIS
16 August	USAREUR S3/G3 Workshop	Grafenwoehr, Germany	65	Units	ITAM
21 September	Company Commander / First Sergeant Course	Grafenwoehr, Germany	65	Units	ITAM
3 - 6 October	RTSDs Baumholder and Mannheim Field Mapping	Various LTAs	6	SME	GIS
27 - 28 October	USAREUR GIS Working Group	Schwetzingen, Germany	10	SME	GIS
1 November	ITAM Viewer Training Class	Ansbach, Germany	20	Units	GIS
2 November	Company Commander / First Sergeant Course	Grafenwoehr, Germany	65	Units	ITAM
9 - 11 May	German Federal Forestry Workshop	Paderborn, Germany	50	Multinational	SRA
10 - 16 April	NATO Environmental Protection Working Group	Brussels, Belgium	45	Multinational	All
31 May	NATO School	Oberammergau, Germany	35	Multinational	GIS
25 May	Museum Exhibit Opening	Grafenwoehr, Germany	35	Public	SRA
17 June	Bundesforst Reception	Vilseck, Germany	50	Multinational	All
11 - 15 July	ESRI Users Conference	San Diego, CA	900	Public	GIS
26 July	MilGeo (Bundeswehr GIS) Meeting	Hohenfels, Germany	3	Multinational	GIS
13 September	Bundesforst GIS Working Group	Grafenwoehr, Germany	5	Multinational	GIS
27 - 29 September	InterGeo	Nuremberg, Germany	350	Multinational	GIS
3 - 6 October	NATO Environmental Protection Working Group	Prague, Czech Republic	55	Multinational	All
18 October	NATO School	Oberammergau, Germany	30	Multinational	GIS
26 - 27 October	Defense Network (DEFNET) Meeting	Warsaw, Poland	30	Multinational	All
22 November	Museum Community Relations Event	Grafenwoehr, Germany	70	Public	SRA
14 - 18 March	Sustainment Workshop	St. Lucia (Republic of South Africa)	40	Multinational	All
9 - 13 May	Environment, Energy, Security & Sustainability Workshop	New Orleans, LA	750	DoD	SRA, GIS
10 - 12 May	EUCOM / AFRICOM Defense Users Group	Heidelberg, Germany	50	Multinational	GIS
20 - 24 May	Sustainment Workshop	Musanze, Rwanda	40	Multinational	All
23 - 27 May	Sustainment Workshop	Nairobi, Kenya	15	Multinational	All
24 - 26 May	EUCOM GIS Working Group	Stuttgart, Germany	35	SME	GIS
27 June - 1 July	USEUCOM Joint Environmental Workshop	Sonthofen, Germany	200	DoD	All
29 August - 2 September	Sustainment Workshop	Accra, Ghana	40	Multinational	All
26 - 30 September	ITAM Workshop	Windhoek, Namibia	35	Multinational	All

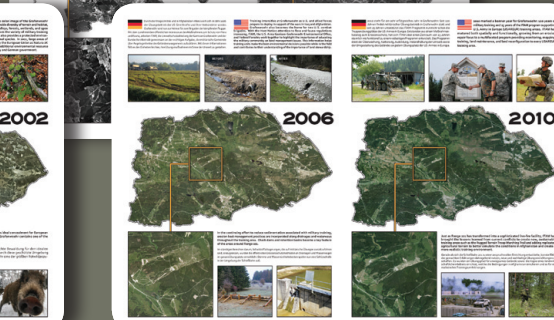
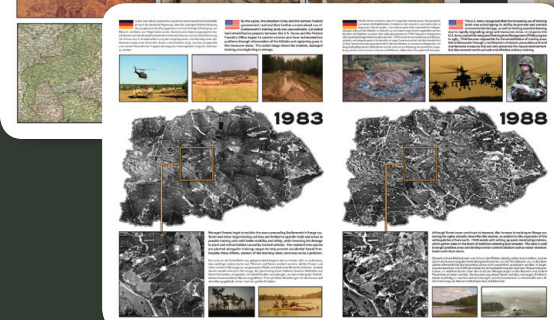
## CITY OF GRAFENWOEHR MUSEUM EXHIBIT

A SUSTAINABLE RANGE AWARENESS exhibit, *Nature's Defense: German-American Environmental Stewardship of the Grafenwoehr Training Area*, focuses on the history of ecological management of GTA. It was on display at the city of Grafenwoehr's Cultural and Military Museum from May to November 2011.

The exhibit uses historical maps, aerial imagery and photos to trace the evolution of land management of Grafenwoehr Training Area from 1910 to the present.

ITAM produced the exhibit to highlight the partnership between the U.S. Army and the German local and federal governments in preserving Grafenwoehr's lands for both military training and the natural environment. The exhibit also highlights the unique plant and animal species that thrive in the training area, many of which are endangered or have become extinct in other parts of Germany.

All the historical maps and aerial imagery used in the display came from the archives of ITAM's GIS office, which maintains maps for all USAREUR training areas and ranges.



## GRAFENWOEHR MILITARY MUSEUM COMMUNITY RELATIONS EVENT

COL Carson, Chief of Staff of the Joint Multinational Training Command (JMTC), presented a vintage 1966 map of the Grafenwoehr Training Area (GTA) on behalf of the JMTC Integrated Training Area Management (ITAM) office to Grafenwoehr Mayor Helmut Waechter during a November 22, 2011 reception at the City of Grafenwoehr Cultural and Military History Museum.

The reception commemorated 25 years of award-winning U.S. and German Environmental Stewardship of the GTA. The map presentation marked the end of the six-month ITAM exhibit at the museum. In attendance were local German Mayors and citizens of the communities surrounding GTA.



1. COL Carson, JMTC Chief of Staff, presents framed map to City of Grafenwoehr Mayor, Hr. Waechter.
2. Over 70 U.S. and German attendees enjoyed the reception commemorating 25 years of partnership.
3. Grafenwoehr Training Area boasts one of the largest populations of red deer in Germany.





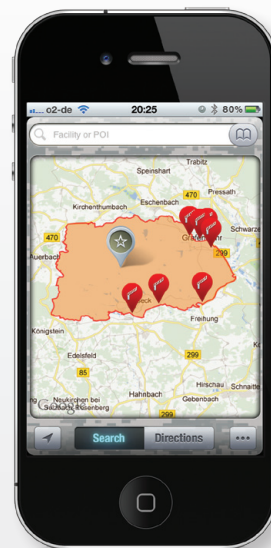
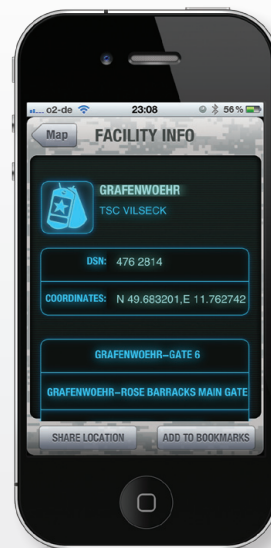
## MOBILE APPLICATIONS

USAREUR ITAM is aggressively pursuing the development and deployment of mobile training support applications. The following applications are aligned with the U.S. Army's intent to leverage technology to make learning continual, not episodic, and provide **Point of Need Learning 24x7**.

### RELEASED



**> ARMY RANGE MAPPER MOBILE**  
The Army Range Mapper is now mobile and includes all USAREUR training areas, gate locations, Esso Gas Stations, and standard topographic or image base maps. Supports navigating to those hard to find training area gates – includes gate-to-gate routing!



### IN DEVELOPMENT



#### > ITAM FIELD TOOLS

A single solution for the training land manager – a set of field utilities coupled with quick reference content. Field utilities include: clinometer, altimeter, 'ITAM' compass, pacer, random number generator, metal detector, and estimators for height, soil type, forest density, cover and line-of-sight. Reference content includes: guidance documents and regulations, risk matrix, field cheat sheets (covering soils, forest, water and erosion), LRAM best practices, and pictures.



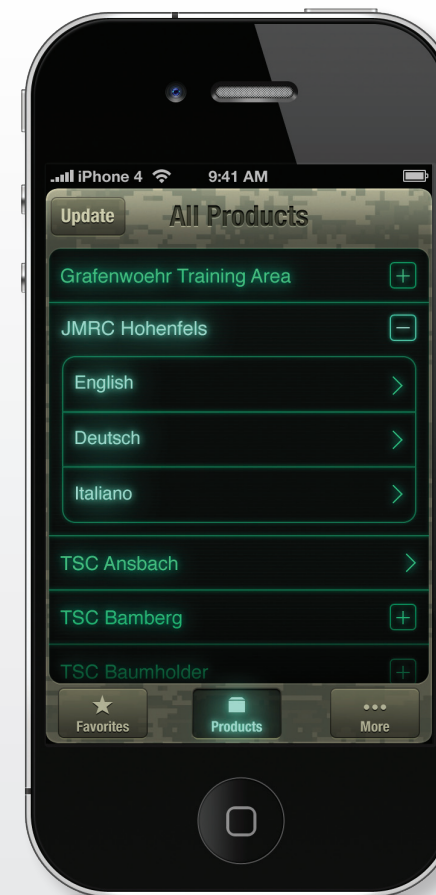
#### > USAREUR ENVIRONMENTAL COMPLIANCE OFFICER REFERENCE

Course Material targeting unit environmental compliance officers which includes the You Spill, You Dig brochure, utilities, guidance documents, regulations, risk matrix, field cheat sheets, maps, hazardous material symbology, and key pictures.



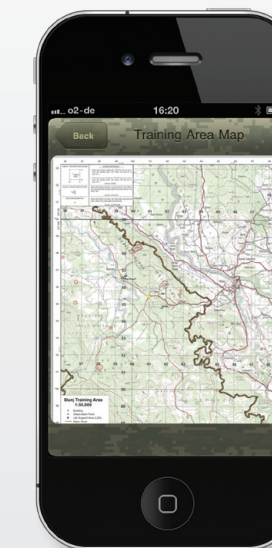
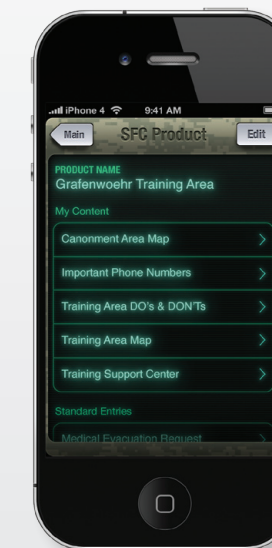
#### > SOLDIER FIELD CARD

New application includes training area maps, safety information and standard guidelines for ensuring continued environmental stewardship. Sections are training area and language-specific and cover the following topics: Medical Evacuation Request, Emergency Numbers and Frequencies, Spill Prevention / Response (including HAZMAT / POL), Vehicle Movement, Washrack Procedures, Training Area DOs and DON'Ts, Wildlife, Policing Training Areas, IED / UXO Report, Camouflage, Weather, Safety Risk Assessment Model, Fire Prevention, and Orientation / Training Area Maps.



#### COVERS THE FOLLOWING TRAINING AREAS:

- Babadag Training Area
- Cao Malnisio Range
- Cellina Meduna / Juliet DZ / Frida DZ / Dandolo MOUT
- Grafenwoehr Training Area
- JMRC Hohenfels
- Monte Carpegna Training Area
- Monte Romano Training Area
- Novo Selo Training Area
- San Giorgio Urban Assault Course
- Slunj Training Area
- TSC Ansbach
- TSC Bamberg
- TSC Baumholder LTA/MTA
- TSC Stuttgart
- TSC Schweinfurt
- TSC Wiesbaden
- T-Series Training Area
- Valle Ugione and Lustrissimi Training Areas





PRODUCTS & SERVICES

# GEOGRAPHIC INFORMATION SYSTEM

## REGIONAL SUPPORT CENTER

The Grafenwoehr Sustainable Range Program Regional Support Center (SRP RSC) provides a hub and spoke GIS support network for all USAREUR training areas and ranges. The RSC brings years of experience and established procedures to the ITAM program.

The Grafenwoehr SRP RSC is one of two worldwide. It provides geospatial support to over 180 U.S. and foreign training areas and Forward Operating Sites. The primary function of the RSC is to ensure a standard GIS capability and to gain efficiencies through centralized support. The RSC focuses on the development of standard GIS databases and provides GIS products and applications to SRP and other mission support offices.

## AUTHORITATIVE GEOSPATIAL RESOURCES

SRP GIS achieves information dominance by delivering the most accurate and complete spatial data sets through user-friendly products and applications. SRP GIS, spearheaded by the ITAM program, provides a standardized geospatial situational awareness of the installation battle space to support all SRP projects and initiatives. In the past five years, the USAREUR SRP GIS geospatial repository has become, arguably, the authoritative source for training area and range geospatial data.

The products shown on the following pages are produced and distributed through the USAREUR Training Support Centers and the Grafenwoehr SRP Regional Support Center free of charge to U.S. Soldiers and DoD civilians. Their further distribution is restricted.

## TSAE TRAINING AIDS PRODUCTION CENTER (TAPC) MAP PRODUCTS



1. 3-D maps of Nella and Frida Drop Zones are used to conduct 173rd ABCT pre-jump briefings.
2. A 4x5 m Kunar, Afghanistan raised relief map table was produced consisting of 10 interlocking tiles.
3. Each of 10 tiles was hand painted to accurately match land use and land cover.

The following quantifications provide a broad overview of GIS production and support in 2011

## GIS SUPPORT

**>41,000**

Soldier Field Cards printed for distribution throughout USAREUR

**>14,000**

Training Area Special Maps produced for Major Training Areas (MTAs) in Germany

**>6,500**

Draft Military Installation Maps printed to support training in USAREUR

**>6,250**

Installation Special Maps produced for Local Training Areas (LTAs) in Germany

**>2,415**

ITAM Viewer DVD Sets distributed throughout USAREUR

**>1,033**

Raised Relief Maps distributed, covering 10 areas

**>632**

GIS / Map Data Request Forms (DRFs) submitted, processed and fulfilled by the USAREUR SRP GIS team

**>157**

Custom Map Requests supported by USAREUR SRP GIS staff

**>52**

USAREUR Training Areas compliant with FY11 SRP Geospatial Data strategy requirements

**>69%**

of all data requests submitted by U.S. Soldiers

**>30**

GIS briefings or training sessions provided at Army workshops and other events in Europe and the U.S.

**>17**

Site visits to USAREUR training areas for GIS data collection and validation

**>10**

New satellite imagery acquisition projects coordinated by the USAREUR SRP GIS team

**>8**

Military Installation Maps Produced for USAREUR Training Areas (two final and six draft)

**>8**

RTLTP Range Modernization projects supported by GIS

## KIOSK STATISTICS

**>22,175**

kiosk interactions

**>12,990**

kiosk download map

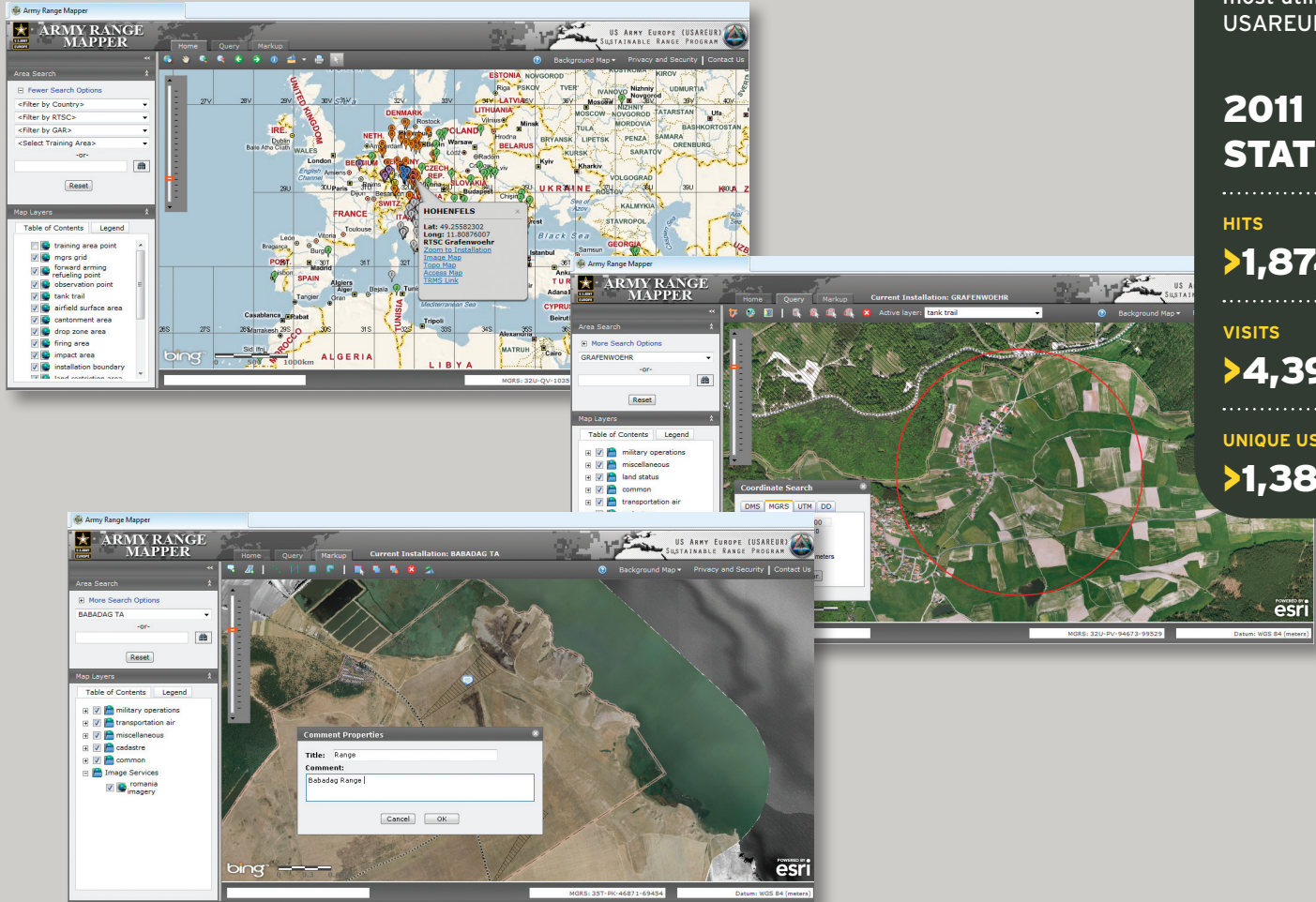
**>7**

TSAE Kiosks located throughout USAREUR

PRODUCTS & SERVICES

# ARMY RANGE MAPPER

[HTTPS://SRP.USAREUR.ARMY.MIL](https://srp.usareur.army.mil)



The power of information is directly proportional to its (controlled) accessibility. The USAREUR SRP website provides information on the ITAM program as well as the latest training news from the USAREUR community. The website is also a convenient portal to all SRP GIS products and services. The USAREUR SRP website (<https://srp.usareur.army.mil>) provides a single NIPRNET solution for training area imagery and vector data and a suite of powerful geospatial tools. SRP's most popular on-line tool, the **Army Range Mapper (ARM)**, distributes worldwide GIS data to Soldiers, trainers, planners, and range control personnel. The ARM is one of the most utilized training support web resources in the USAREUR community.

## 2011 STATISTICS

HITS

**>1,874,703**

VISITS

**>4,392**

UNIQUE USERS

**>1,389**





PRODUCTS & SERVICES

# DIGITAL MEDIA



### ITAM VIEWER

The ITAM Viewer is a DVD-based collection of vector and raster GIS data for USAREUR training areas and ranges, accompanied by easy-to-use software. Geospatial data is available for training areas in Germany, Italy, Romania, Bulgaria, Bundeswehr-controlled training areas, and other training sites located throughout Europe and Africa. The ITAM Viewer comes as a 5 DVD set.

**DVD 1**

Grafenwoehr, JMRC Hohenfels and Bundeswehr

**DVD 2**

Local Training Areas

**DVD 3**

Italy Training Areas

**DVD 4**

Joint Forward Operating Sites

**DVD 5**

PDF Map Library

**2011 DISTRIBUTION**

>2,415



PRODUCTS & SERVICES

# MAPS AND ATLASES

Large format maps, atlases, and other geospatial products are available from the Training Support Centers (TSC) and the SRP RSC. To expedite your order, data request forms can be submitted via email.

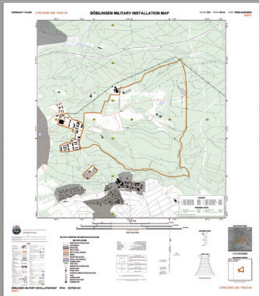


### USAREUR COMMAND OVERVIEW - TRAINING SUPPORT MAP

The USAREUR Command Overview - Training Support Map summarizes valuable information on in-theater training capabilities and projects stationing and training support requirements over the next 5 years.

**2011 DISTRIBUTION**

>115

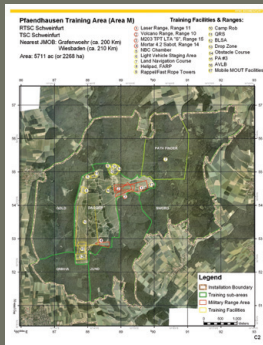


### INSTALLATION MAPS

Installation Special maps display topographic data and military training features for selected USAREUR training areas. Maps include aerial imagery, locator route maps, and Soldier Field Card information.

**2011 DISTRIBUTION**

>6,250



### PDF MAP BOOK

The PDF Map Book consists of a set of static overview maps for more than 60 training areas in USAREUR. Each map sheet uses the latest imagery and map data and is available from a TSC kiosk or the SRP website.

**2011 DISTRIBUTION**

>12,052



### RAISED RELIEF MAPS

Raised Relief Maps are 3D plastic molded maps that depict contoured landscapes using high resolution Digital Terrain Models. Available for: Grafenwoehr Training Area, JMRC Hohenfels, Afghanistan Provinces (Kabul, Kunar, Paktika), Europe, Africa, Middle East, and the Caucasus region.

**2011 DISTRIBUTION**

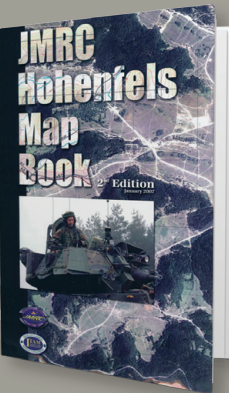
>1,033

### MAP ATLASES

Map Atlases such as the JMRC Hohenfels Map Book and the USAREUR PDF Map Book are also available.

**2011 DISTRIBUTION**

>60





## PRODUCTS & SERVICES

# OTHER PRODUCTS

A number of other GIS and Sustainable Range Awareness products, including the popular Soldier Field Cards, are available for all USAREUR training areas. Many of the SRP educational products (e.g. calendars, playing cards, and coloring books) are distributed at community and host nation events.

## TRAINING SUPPORT KIOSKS

All ITAM range and training area maps are also available from the TSAE Kiosks located at Grafenwoehr Range Operations and select Training Support Centers (TSC). In addition to PDF maps and the ability to create new maps using the ITAM Viewer, Kiosk users can also obtain information on TSC assets, Deployable Instrumentation System - Europe (DISE), and the Training Aids Production Center (TAPC). Customers can print letter and large format maps directly to the Kiosk printer.



## KIOSK INTERACTIONS

>22,175

## KIOSK DOWNLOAD MAP

>12,990

TSAE KIOSKS LOCATED THROUGHOUT USAREUR

>7



## 2011 SOLDIER FIELD CARD DISTRIBUTION

>41,000

## SOLDIER FIELD CARDS

The award-winning Soldier Field Cards provide essential guidelines on training area usage; vehicle movement; petroleum, oil and lubricants handling; and fire prevention. Field Cards also include MEDEVAC procedures, radio frequencies, emergency phone numbers, and a training area reference map. All cards are printed on moisture-, rip-, and puncture-resistant material.

## AVAILABLE SOLDIER FIELD CARDS

- Babadag Training Area
- Cao Malnisio Range
- Cellina Meduna / Juliet DZ / Frida DZ / Dandolo MOUT
- Grafenwoehr Training Area
- JMRC Hohenfels
- Monte Carpegna Training Area
- Monte Romano Training Area
- Novo Selo Training Area
- San Giorgio Urban Assault Course
- Slunj Training Area
- TSC Ansbach
- TSC Bamberg
- TSC Baumholder LTA/MTA
- TSC Stuttgart
- TSC Schweinfurt
- TSC Wiesbaden
- T-Series Training Area
- Valle Ugione and Lustrissimi Training Areas



Soldier Field Card Mobile Application

## OTHER PRODUCTS

Also available are SRP calendars, camouflage posters (winter and summer versions), playing cards, and *You Spill, You Dig* booklet, a practical, field-expedient spill response guide. The Grafenwoehr SRP Regional Support Center offers non-standard products based on specific customer requirements. Some examples are maps of defined areas or unique scale, user-defined data layers, line of sight maps, and range maps. Services also include GPS digital data collection and acquisition for specific training events.

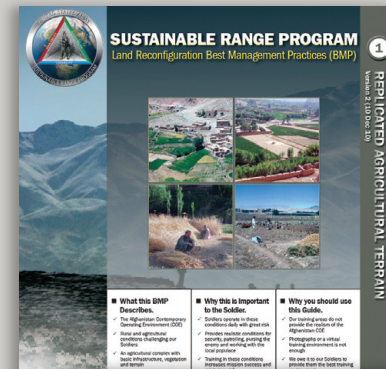
## REQUESTS

For more information on these or any of the products the ITAM program offers to support the training mission of the U.S. Army, please contact the ITAM office at DSN 475-ITAM or visit the SRP website: <https://srp.usareur.army.mil>

## PRODUCTS & SERVICES

# NOTABLE DOCUMENTS

## USAREUR SRP LAND RECONFIGURATION BEST MANAGEMENT PRACTICES



## GRAFENWOEHR TRAINING AREA

SUSTAINABLE RANGE PROGRAM INTEGRATED TRAINING AREA MANAGEMENT



2011 ANNUAL REPORT

Prepared by Caitlin Bergmanis, CTA ITAM Coordinator February 2012

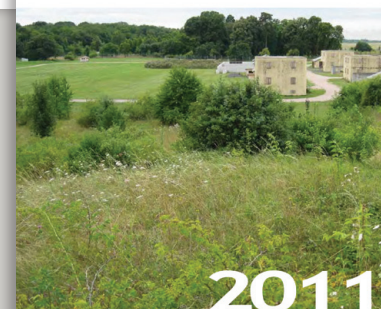
## GRAFENWOEHR ANNUAL REPORT 2011

## GRAFENWOEHR MILITARY MUSEUM EXHIBIT BOOKLET



## USAREUR LOCAL TRAINING AREAS

SUSTAINABLE RANGE PROGRAM INTEGRATED TRAINING AREA MANAGEMENT

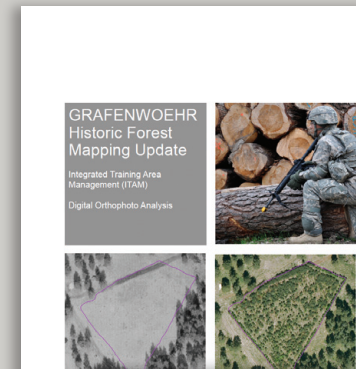


2011 ANNUAL REPORT

Prepared by USAREUR ITAM January 2012

## LOCAL TRAINING AREAS ANNUAL REPORT 2011

## GRAFENWOEHR AND JMRC HOHENFELS HISTORIC FOREST MAPPING UPDATES



## JOINT MULTINATIONAL READINESS CENTER, HOHENFELS

SUSTAINABLE RANGE PROGRAM INTEGRATED TRAINING AREA MANAGEMENT

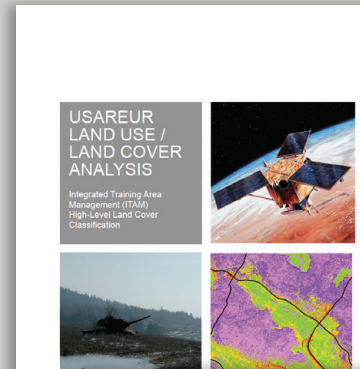


2011 ANNUAL REPORT

Prepared by the JMRC Hohenfels ITAM Staff January 2012

## JMRC HOHENFELS ANNUAL REPORT 2011

## USAREUR LAND USE / LAND COVER STUDY



## USAREUR GEOGRAPHIC INFORMATION SYSTEM

SUSTAINABLE RANGE PROGRAM



2011 ANNUAL REPORT

Prepared by USAREUR Integrated Training Area Management (ITAM) January 2012

## USAREUR GEOGRAPHIC INFORMATION SYSTEM ANNUAL REPORT 2011



## FUNDING AND WAY AHEAD

Department of the Army and USAREUR continued to provide strong funding support to the ITAM program in fiscal year (FY) 2011. The Army supports ITAM’s critical role in sustaining and enhancing the training land platform.

### ► WAY AHEAD

2012 will be another busy year for USAREUR ITAM, though the program will strive to reduce costs to operate effectively in a fiscally constrained environment. Funding priority will remain with critical land repair and maintenance projects followed by Command directed land reconfiguration projects and priority Geographic Information System projects (e.g. aerial imagery) at the Major and Local Training Areas.

ITAM will continue to surge and ebb support as the force structure in Europe transforms. Spatially, ITAM will provide full support to all U.S. Army Europe enduring training areas and GIS support to training areas which have agreements for training U.S. forces. Functionally, increased focus will be placed on enhancing the training platform through innovative land reconfiguration projects that support both the current and future missions. This balance between land sustainment and enhancement will be dependent on ITAM’s ability to create and sustain partnerships. ITAM will also continue, as directed, to take a leading role in multinational cooperation initiatives, to include working with EUCOM, AFRICOM, and NATO.

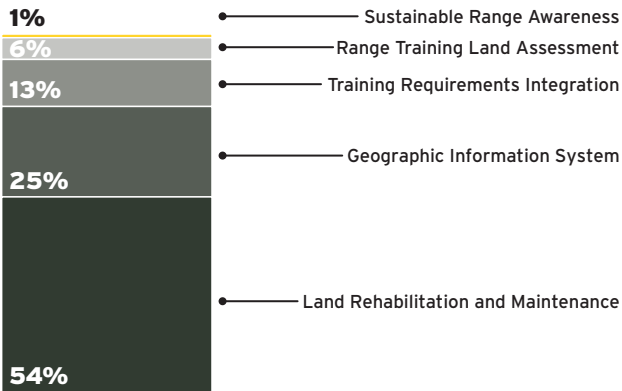
### SPATIAL LOCATION

Spatially, USAREUR ITAM funding continued to focus on the Major Training Areas: Grafenwoehr and JMRC Hohenfels. Two-thirds of program funding was executed at JMRC Hohenfels (49%) and Grafenwoehr (17%) training areas. ITAM also funded significant land repair projects at enduring Local Training Areas and Italy (17%). Notably, Local Training Areas under Regional Training Support Division Schweinfurt each received approximately 7% of total funding in land repair and enhancement projects. Execution of GIS support at the installation level and via the Regional Support Center’s “hub and spoke” approach amounted to 17% of FY 2011 funding.

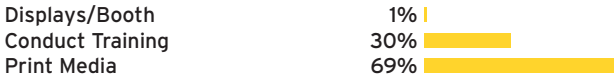


### COMPONENT

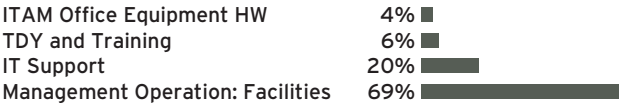
Functionally, training area land repair and enhancement projects continued to be the dominant USAREUR ITAM component (54%). Major Training Area and regional GIS support staff comprised the bulk of the SRP GIS component (25%) execution, with the Training Requirements Integration (13%) and Range and Training Land Assessment (6%) components following. As in past years, the Sustainable Range Awareness component (1%) provided publicity for the Command with relatively minimal investment. Access to ITAM’s web-based Workplan Analysis Module, detailing itemized funding breakdowns and digital copies of all funding / project documentation, is available upon request.



#### SUSTAINABLE RANGE AWARENESS



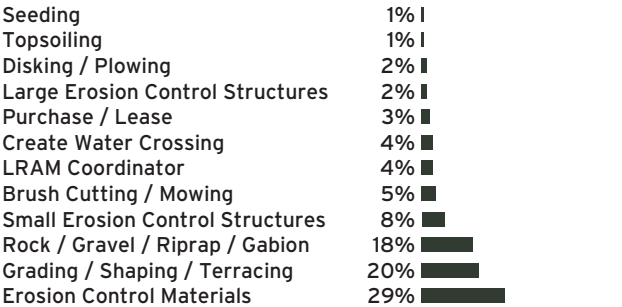
#### TRAINING REQUIREMENTS INTEGRATION



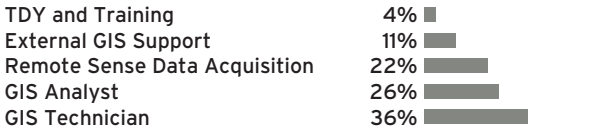
#### RANGE TRAINING LAND ASSESSMENT



#### LAND REHABILITATION AND MAINTENANCE



#### GEOGRAPHIC INFORMATION SYSTEM



“...MOST OF THE MILITARY AREAS, AND ESPECIALLY THOSE USED FOR TRAINING AND TESTING, CONTAIN SIGNIFICANT, EVEN SPECTACULAR, AMOUNTS OF NATURAL AND SEMINATURAL HABITATS AND LANDSCAPES, WITH CORRESPONDING ABUNDANCES OF WILDLIFE. SOMETIMES THEY ARE AMONG THE RICHEST AND MOST IMPORTANT SITES FOR BIODIVERSITY IN THEIR COUNTRY.”

“LIFE, Natura 2000 and the Military”  
European Commission Environment Directorate General



**[HTTPS://SRP.USAREUR.ARMY.MIL](https://SRP.USAREUR.ARMY.MIL)**

For further information or copies of this Stewardship Report, please contact the ITAM office: +49 (0)9641-83-ITAM or **[USAREUR.SRP.CONTACT@US.ARMY.MIL](mailto:USAREUR.SRP.CONTACT@US.ARMY.MIL)**

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